



THE GUNS OF KINGSTON

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1991

David Francis

THE KINGSTON GUNNERS

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by

David Francis and Barry Porteous

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INTRODUCTION

At the 1990 Annual Meeting of the Kingston Gunners, an Association of serving and retired officers of the Royal Regiment of Canadian Artillery, it was suggested that a useful project for our Association would be a survey of the guns of Kingston. Two members, David Francis and Barry Porteous volunteered to do the survey. Since there were no terms of reference and the authors felt entirely free to carry it out in whatever manner they saw fit, a word of explanation may help to clarify the result.

From the outset we were aware that the guns of Kingston were of considerable historical significance and that there were a great many of them. We were also aware that other surveys had been carried out in years gone by and we felt that any existing lists would provide a useful starting point for our survey. We hoped to build on the work of our predecessors and in that way bring their lists up to date.

In following this approach we quickly learned that the past records were somewhat patchy and that there were separate lists for Fort Henry, Royal Military College, Fort Frontenac, Murney Tower and city parks. We therefore approached the appropriate authorities at these locations and without exception met with unstinting help and co-operation. A list of acknowledgements appears elsewhere in this report and we are most grateful to all those who assisted in our project.

Having established the necessary contacts and having provided ourselves with what lists were available, we set out to do the field work which consisted of checking, listing and photographing every gun we could find. This information we entered in a data base in a personal computer, and is reproduced at Annex A.

One of the most difficult decisions was where to draw the line as to which guns should be included. Although our basic intention was to list artillery pieces, we did include the primary armament of armoured vehicles, naval guns and such historic weapons as an 1883 Gatling Gun and a famous one inch Rampart Gun known as "Brown Bess", but otherwise small arms were not included. We decided that only authentic weapons would be listed, thus excluding model guns of all types and sizes. Lastly, we felt that the considerable numbers of incomplete guns in the form of gun barrels should be included since they are of historical significance and in ancient weapons lack only a reproduced carriage to be classed as complete guns.

Geographically, we resisted the temptation to rove farther afield than the immediate environs of Kingston, knowing full well that there are guns, for example, in Gananoque, Napanee, Perth and Picton. Similarly, we decided not to get involved on the other side of Lake Ontario. For background atmosphere we did visit the "battlefield" at Sackett's Harbour, NY where there are a few old guns, both US and British. The most interesting of these, from our point of view, was a 32 pounder, sans trunnions, bearing the royal cypher of George II, which would date its origin to 1727-1760. We were intrigued, too, with the story of a naval bombardment of Sackett's Harbour by HMS Royal George and other Canadian ships. According to the American account their shortage of ammunition led the defenders to retrieve some of the Canadian shot and fire it back at the ships. But since the shot was of a calibre smaller than the American guns they remedied this discrepancy by wrapping the ball in a piece of carpet before ramming it down the muzzle. One has to marvel at this unique method of reducing windage!

Inevitably, as we became immersed in the fascinating world of antique guns, there was a temptation to attempt "the" definitive reference on the subject, at least insofar as it pertains to the guns of this area. We have resisted this impulse, however, for several reasons. In the first place, notwithstanding our individual personal qualifications, we see ourselves as rank amateurs in the field and we feel there are professionals who could do a much better job of it, if indeed there is any demand for such a publication. Secondly, such a book would necessarily draw heavily on the already formidable array of existing works. We have therefore decided to stick more or less to the original concept of a "survey" and to include a bibliography of the excellent books we have encountered. We strongly recommend that our modest effort be read in conjunction with the excellent little pamphlet "An Introduction to British Artillery in North America" by S. James Gooding.

By this roundabout introduction we thus finally come to the aim of our project, which is to provide an up-to-date census of the Guns of Kingston. We have tried to make the result a little more interesting than just a computer printout and we hope the result may be acceptable not only to our parent organization, The Kingston Gunners, but also to all those interested in gun development and the part played by these guns in the history of Kingston.

ACKNOWLEDGEMENTS

Fort Henry

Stephen Mecredy
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Royal Military College

Dr Jack Pike
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Ross MacKenzie
Capt K Robichaud

Bellevue House

John Grenville

City of Kingston

Douglas Fluhrer

Murney Tower Museum

Jody Eskrit

Brig Gen (Ret'd) C de L Kirby

Brig Gen (Ret'd) W W Turner

Lt Col (Ret'd) L V Lushington

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- Robt Wilkinson Latham
- Firepower - Weapons Effectiveness on the Battlefild 1630-1850
Maj Gen BP Hughes CB CBE
- The Gun Founders of England - Chas ffoulkes CB CBE
- Coast Artillery 1815-1914 - Roger F Sarty
- Fort Henry, Citadel of Upper Canada - St Lawrence Pks Comm
- Cannon of Pendennis and St Mawes Castles, Cornwall
- Austin C Carpenter
- Cannon of Dartmouth Castle, Devon - Austin C Carpenter
- Defending Halifax: Ordnance 1825-1906 - Parks Canada
- A History of Artillery - Ian V Hogg
- Artillery - John Bachelor and Ian Hogg
- Round Shot & Rammers (Intro to Mzl Loading Land Arty in US)
- Harold L Peterson
- British Smooth Bore Artillery - Maj Gen B P Hughes CB CBE
- The Snowy Owl 1955, Kingston's Martello Towers
- N. M. Shackleton
- A Short History of Kingston as a Military and Naval Centre
- George F.G. Stanley and Richard A. Preston

NUMBERS AND TYPES OF GUNS

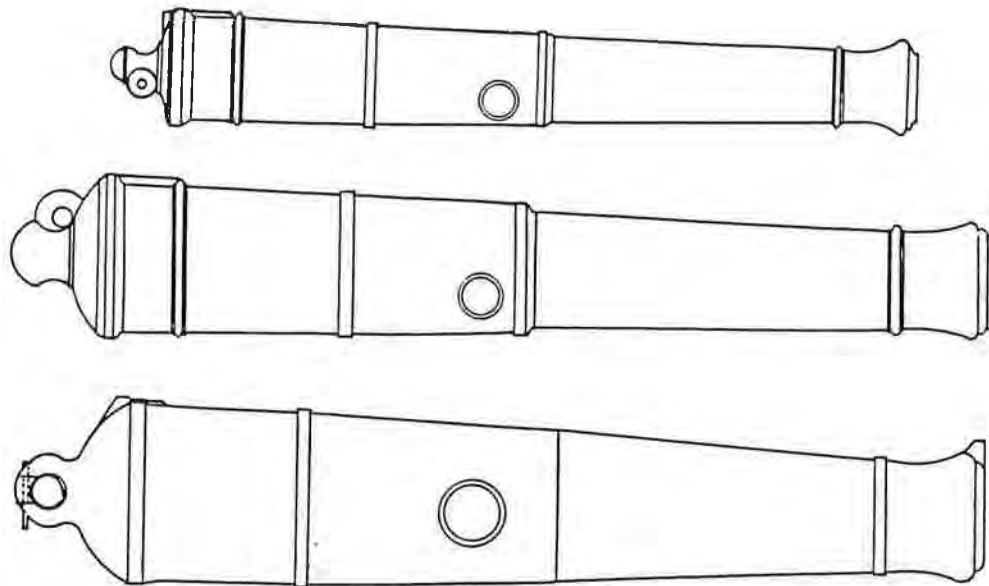
"As regards the proper length and charge for a piece, ...if the length of a piece of any calibre be 21 diameters of its shot, and loaded with powder equal to half the weight of the shot, it will carry farther than any other of the same calibre, either longer or shorter, loaded with any charge whatever".

John Muller, TREATISE OF ARTILLERY, 1757.

The purpose of this section is to give a brief introduction to the various types of guns found in the Kingston area.

As pointed out by James Gooding in his Introduction to British Artillery in North America, ordnance in use in North America in the 18th and 19th centuries fell into four main types: guns, carronades, howitzers and mortars. Gooding quotes the Textbook of Service Ordnance, 1886, which stated "Guns may be defined as those pieces which have a length of at least 12 calibres and upwards, and which are adapted for firing either shot or shell". He classes carronades as "short pieces of ordnance having less thickness of metal than guns of the same calibre and normally of about 7 calibres length.... Howitzers are....intended for horizontal or higher angle fire. Their length varies from 5 to 10 calibres..... Mortars are.... suitable only for high angle fire. The usual length of a mortar was 3 or 4 calibres".

Displayed at Fort Henry are a number of very old gun barrels of both French and British origin, some of which are thought to have been installed in the last Fort Frontenac, and which were probably quite ancient by the time Fort Frontenac was captured by the British in 1758. Since gun design changed little in those days and cast iron barrels were of enduring quality they tended to remain in service for many years. But eventually, when obsolescence overtook them in the 19th century they were condemned by striking off their trunnions and relegated to their final useful function as ballast in ships of war. When the Rush-Bagot Treaty of 1817 consigned their host vessels to the bottom of Lake Ontario these barrels rested in their watery grave in Deadman's Bay until salvaged in the last few years. Cast in the days before there were any conventions about the marking of ordnance and obliterated by years of water immersion, these barrels are generally of a basic design and show little accurate identification as to age.



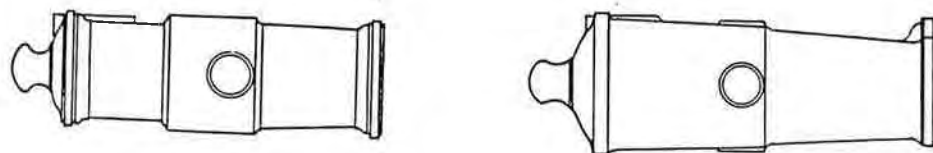
Guns

(upper) Armstrong's Pattern gun
 (middle) Bloomfield's Pattern
 (lower) Millar's Pattern gun.

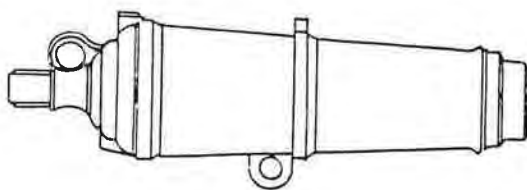
By far the largest number of guns, however, date from the hey-day of British defence construction in Kingston in the early to mid 19th century. This period coincided with an active period of British gun development and several of these developments are reflected in the types of weapons which made their way to Kingston. Among them the "standard" and most numerous are the Bloomfield pattern guns. Named for Director General of the Ordnance Sir Thomas Bloomfield (or Blomfield), they are recognized by their graceful three tiered taper and slightly flared muzzle.

A variation of smooth bore muzzle loading gun was an 1834 design by Sir William Millar, constructed to fire shell instead of shot. One of these guns at RMC is shown as a Millar gun since that is the way it was shown on the original RMC list. Four more of them at Fort Henry, however, are shown as "Shell guns" because they were so named on the Fort Henry list. Again quoting James Gooding: "In outward appearance they were similar to the common gun except for the removal of some of the minor parts - fillets, astragals, reinforce rings, and breech mouldings, and internally they were made with a tapered powder chamber".

Several guns are listed as Armstrong guns, so named for Sir William Armstrong, who in 1859 was appointed Superintendent of the Royal Gun Factory, Woolwich. Armstrong, instead of taking an existing smoothbore gun and rifling it, which up to this time had not been very successful, abandoned cast iron for wrought iron and built up his gun by shrinking a succession of tubes around the basic barrel, building up the requisite thickness of metal proportional to the internal pressure along the gun. The barrel was rifled and the gun was breech loaded. After trials in 1855 this system was adopted by both the British Army and the Royal Navy and altogether some 4500 guns were produced, but by 1863 it was decided that the breech closing system was unsafe and unable to withstand the pressures necessary to propel a shot hard enough to smash through iron ships. Once more there was a move to muzzle loading cannon, but this time employing a rifled bore and studded shells.

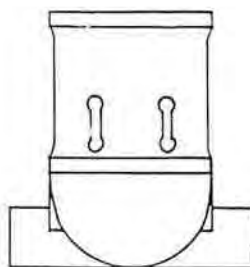


Howitzers



Carronades

Another weapon in considerable numbers is the carronade, built by the Carron company, a Scottish iron-founding and shipping firm, which in 1774 was persuaded to produce a short piece of 8 inch calibre, firing a 68 lb ball, but with a powder charge of only five and one half pounds. This weapon was named "the Smasher" for its effectiveness at short range against shipping and by 1791 had been mounted in 429 ships. Those in the Kingston area are designated 24 and 32 pounders.



Mortars

The term "Coehorn mortar" refers to small 4.5 inch mortars named after their inventor, Baron Menno van Coehorn, a Dutchman. They are light pieces designed to be carried by two men and so were the most mobile of the regular mortars.

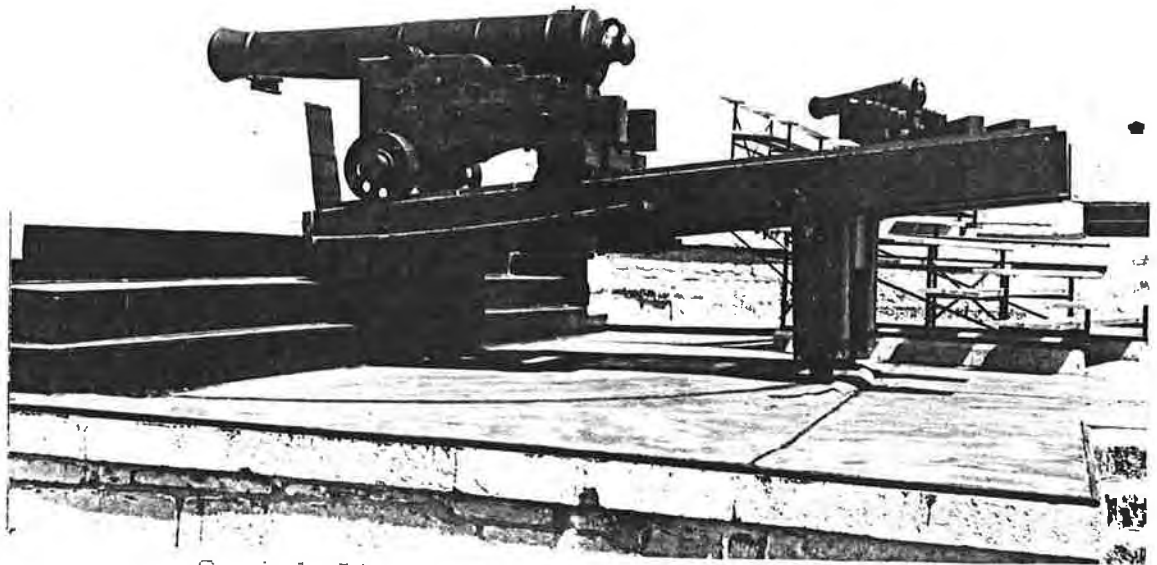
With the profusion of guns in the Kingston defences, it is interesting to note that with rare exceptions most were never fired in anger. Apart from the very old weapons mentioned at the beginning of this section which in their earliest incarnation may well have seen active service, the only other known action in which any of these guns participated was one recorded in the RMC Museum located in the Fort Frederick Martello tower. This mentions a maritime raid by US forces which "exchanged shots" with guns at Fort Frederick. Dare we suggest that the shooting was ineffective and the casualties light?

A summary showing the numbers and types of guns at each primary location is shown at Annex C. From this it will be seen that the answer to the Gunner trivia question "How many guns are there in the Kingston area?" is 15~~5~~. However, one of these is a twin barrelled naval gun, so that adds one more to the total. We can conveniently ignore 9 additional barrels of a 10 barrelled Gatling gun on the grounds that it is a small arms weapon and really should not be included at all!

All of the 15~~5~~ guns have been seen and checked by the authors with the exception of the two 24 pounders in the ditch towers at Fort Henry. We were unable to gain access to these towers because they were deemed unsafe.

GUNS OF SPECIAL INTEREST

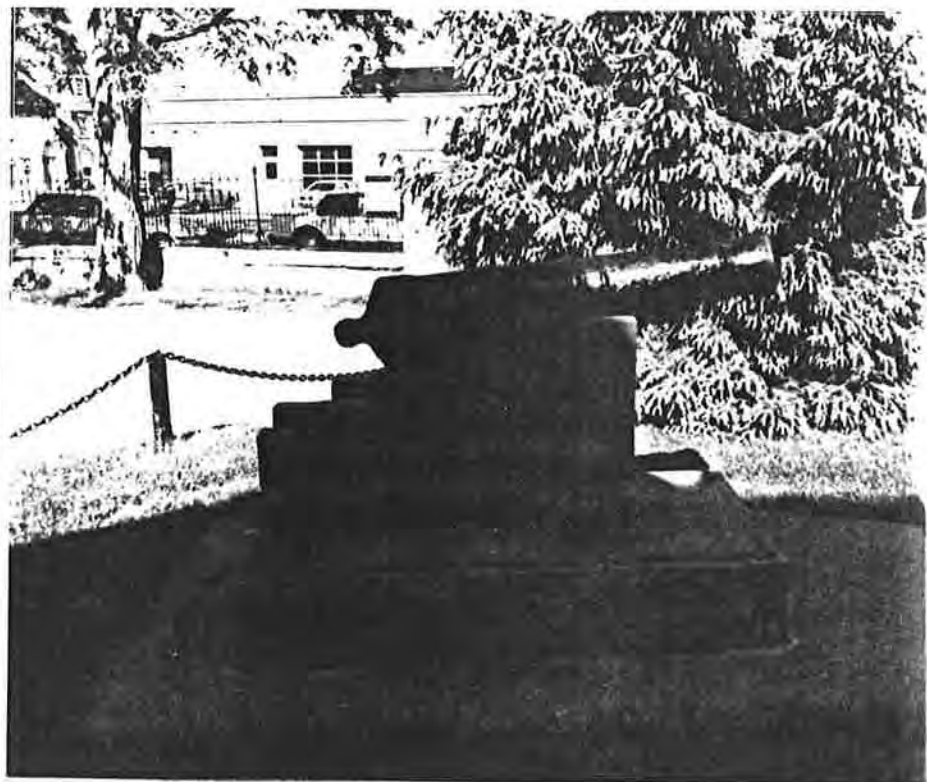
The oldest gun positively identified is that listed at Serial 21, Code# AA 103, a 32 pr mounted on the west wall of Fort Henry ramparts. This gun is clearly marked on the left trunnion as having been manufactured by Carron in 1796, just five years short of 200 years ago and 71 years before Confederation.



Serial 21, a 32 pounder dated 1796

Other contenders for the distinction of oldest gun are among those mentioned earlier as having been salvaged from the waters of Deadman's Bay and listed as Serials 56-68 and 74-75. Some of these are of French origin and according to the Whig Standard article of June 4, 1908, "were in place at the last Fort Frontenac. They were probably quite old when Lieutenant Colonel John Bradstreet captured them in 1758, after which they led a typically knockabout existence, becoming more and more obsolete until they were good only for ballast. That's how they came to be among ones recovered in 1938 from the wreck of the War of 1812 frigate HMS Prince Regent which was scuttled in Deadman's Bay in the 1840s". Other ships from this era from which gun barrels at Serials 57 and 58 were recovered include HMS St Lawrence, launched 1814, and HMS Charlotte. All of the above mentioned barrels had been condemned as unfit for use by striking off the trunnions.

One of several other contenders for the distinction of oldest gun is that shown at Serial 108, Code# K 07, "Shannon's Cannon", also known as "Queen Bess", an ancient 3.5 inch gun now sleepily guarding St Andrew's Presbyterian Church at Princess and Clergy. Its brass plaque proclaims that it "came from the ramparts of Londonderry, Ireland, where it defended Protestantism from 1649 to 1688. Presented to William Shannon of Kingston in 1865. In 1909 it was presented to St Andrew's Presbyterian Church by the Apprentice Boys of Derry Lodge #1 and restored in 1990". One is perhaps inclined to wonder whether a little of the blarney is not reflected in this testimonial, in particular, its "defence of Protestantism on the ramparts of Londonderry" in 1649, the year that Charles I of England lost his head! However, according to the Kingston Whig Standard of June 4, 1988, James Gooding believes this gun to be the third or fourth oldest artillery piece in the country. In any case, an 1865 article in the British Whig reports the gun's arrival on the steamship Moravia, describing it as a 6 pr, 6 feet long, weighing 1080 lbs. The accuracy of this report is also suspect as the barrel in 1991 measures just 3 feet long!



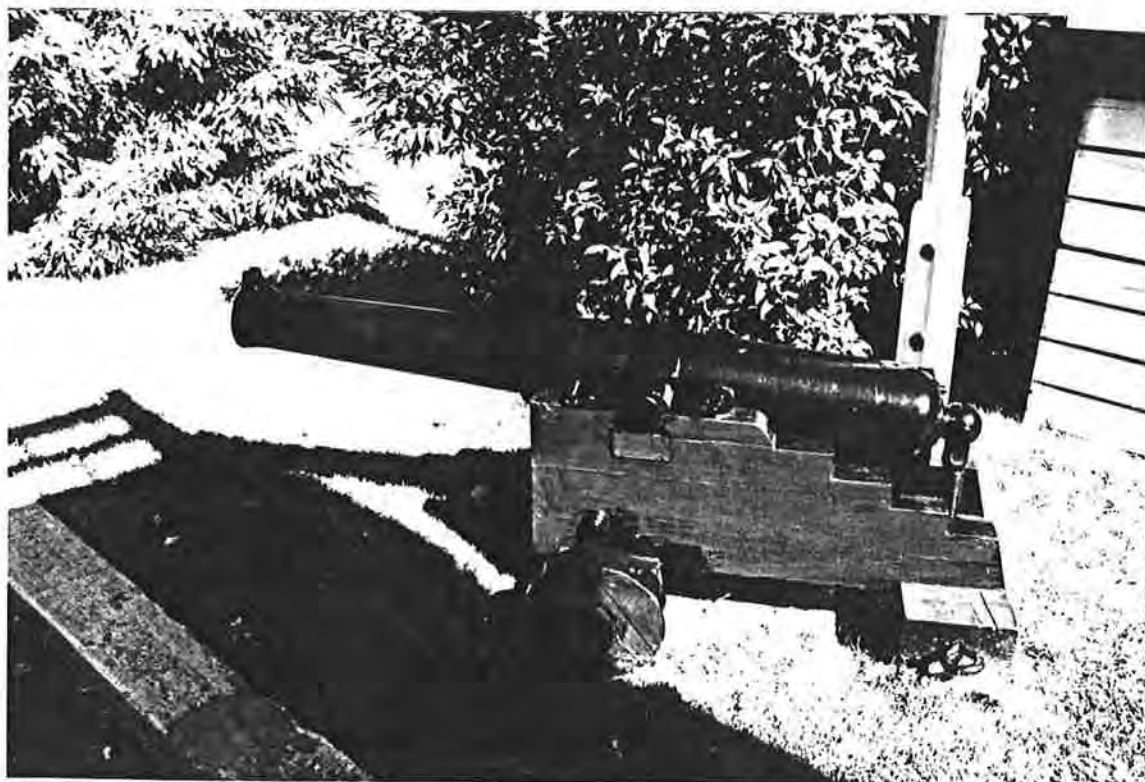
Serial 108, Shannon's Cannon

Serial 109, Code K 08 is a 3 pr QF Nordenfeld Mk I gun located at the residence of Brigadier General C de L Kirby. This gun was manufactured by Maxim-Nordenfeld in 1890. It has a rifled bore and is breech loading. It has a simple buffer and recuperator and is fitted with rim brakes activated by a crank located in front of the shield. The gun is mounted on a Carriage 3 Pr QF Travelling Mk II, designed to take either the Nordenfeld Mk I or the Hotchkiss Mk II gun. Found among a shipment of miscellaneous artillery relics from the Fort Henry stockade which were destined as range markers at Petawawa, this gun later accompanied General Kirby to Fort Frontenac and now keeps silent vigil over the locust trees in the garden of his home.



Serial 109, the Kirby gun

Serial 112, Code# K 11 is a 9 pr rifled muzzle loading gun on a garrison carriage which was presented to Brigadier General W W Turner in his capacity as Colonel Commandant of the Royal Regiment of Canadian Artillery. The 9 pr RML was the first gun to be made from steel by forging and machining, hence the "Firth Steel" inscribed on the muzzle face. This gun was manufactured by the Royal Gun Factory in 1873. According to the Royal Artillery Institution, Woolwich, it is thought to have been brought to Canada by one of the RA batteries of 7 Brigade RA, stationed at Halifax 1873-76, although the 9 pr was also used by the Royal Navy. It now guards the approaches to General Turner's swimming pool.



Serial 112, the Turner gun

Serial 155, Code K 12 is a small smoothbore muzzle-loading gun of approximately 1.75 inch calibre and 2'8" in length, belonging to Lt Col (Retired) L V Cushing. Very little is known about this gun other than that it is supposed to have been a saluting gun on a French man o' war which foundered in Hillsboro Bay at the entrance to Charlottetown harbour in the 1700s and was among ship's stores salvaged by local residents. Its next home was in the village of Rustico at a hotel owned by one John Newsom, until the hotel burned down in 1905. For many years it lay more or less abandoned on farm property belonging to Mrs Cushing's relatives until discovered by Col Cushing who recommended it be placed in the Charlottetown Museum. When the museum failed to show any interest Col Cushing bought the gun, transported it to Kingston, constructed a wooden reproduction carriage of "local pattern" and mounted the gun in his back yard. The gun has no discernible markings other than a faint illegible mark on the right trunnion, but given the folklore of its origin, it would seem to be very old and probably dates at least from the 18th century.

Serials 103 and 104, Codes K 02 and 03 are two Russian guns dating from 1823 and 1826, located in City Park at King and West St. Following the Crimean War a number of captured Russian guns were made available to Canada as souvenirs and these two came to Kingston where they now flank the statue of the Father of Confederation.



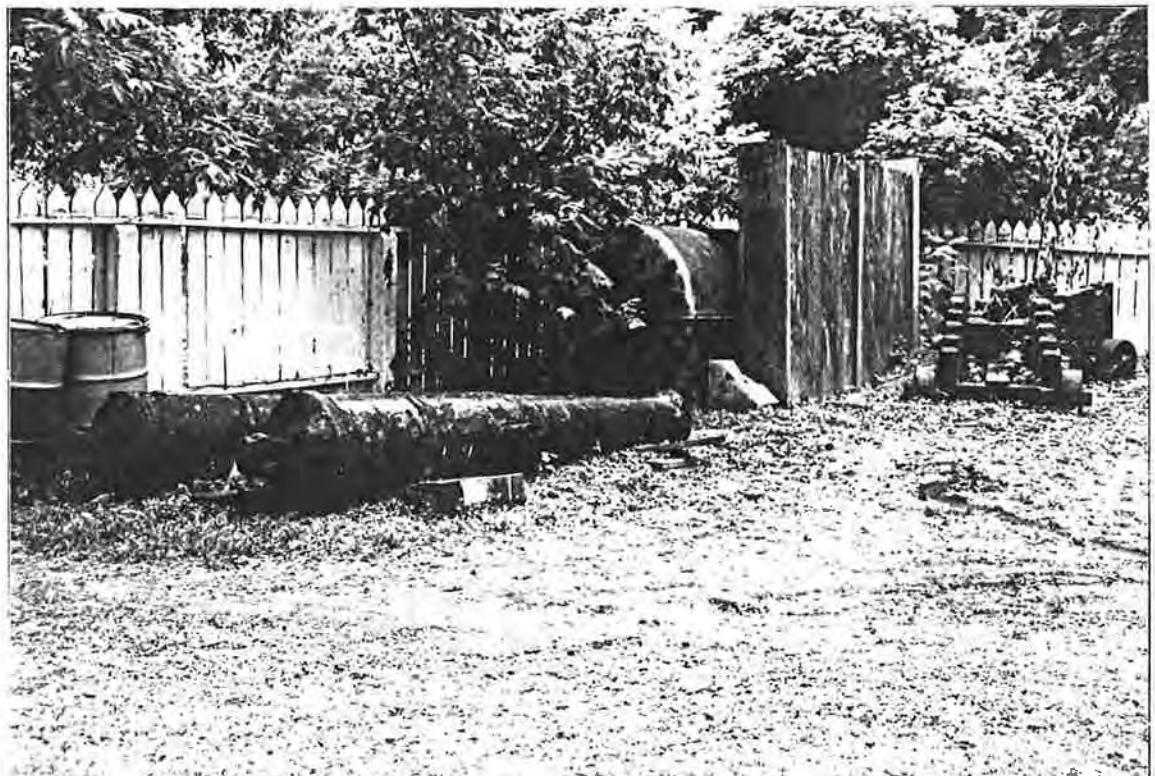
Serials 103 and 104, the Russian guns

Serials 153 and 154, Codes RMC 38 ad 39 are two gun barrels of 4.75 inch bore, stuck in the road, one on either side of the inner main gate at the Royal Military College. Inclined outward at an angle of 30 degrees these barrels are thought to have been planted in the roadway for the purpose of guiding the wheels of horse-drawn vehicles and thus minimizing damage by careless drivers either to the wrought iron gates or the vehicle wheels. An old photo in the RMC archives shows them in place in 1883.



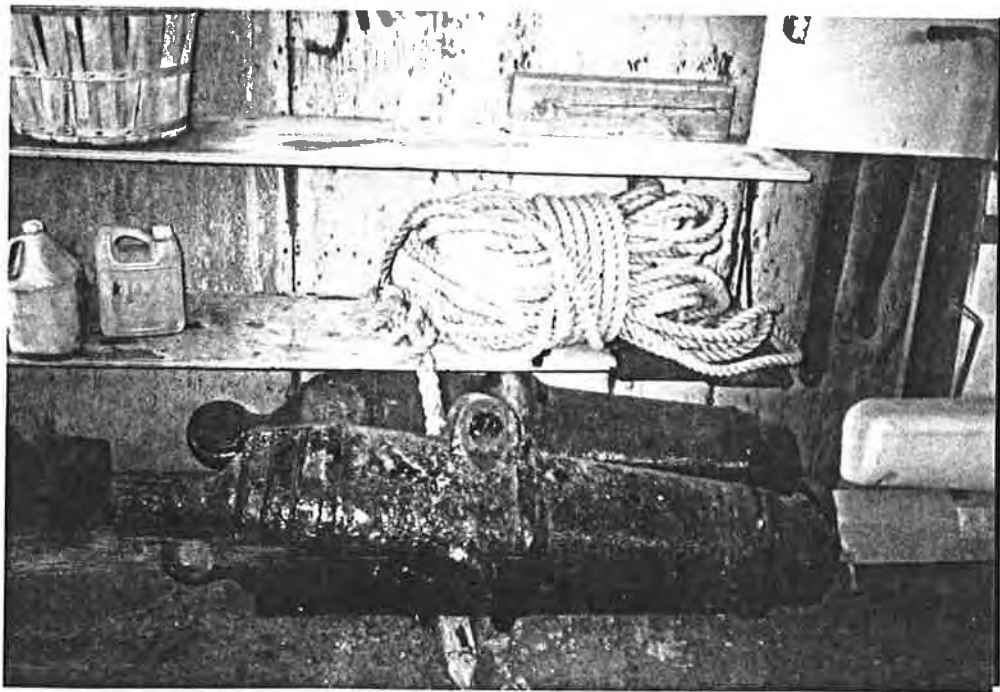
Serials 153 and 154, gun barrels in the road at RMC

Serials 124 and 125, Codes RMC 09 and 10 are two Palliser gun barrels now reclining among the weeds and other debris at the paint yard of the Royal Military College, where they have rested ignominiously for several years, their deteriorating wooden carriages nearby. The interesting thing about these weapons is that they are alleged to be the only Palliser guns outside of the UK. Manufactured in 1870 by the Royal Gun Factory they represented an early advance on the smooth bore barrel by the insertion of a grooved iron sleeve. Studs on the projectile following these grooves imparted a stabilizing spin, improving accuracy. This system was invented by a Capt Palliser of the British 18th Hussars, according to Ian V Hogg's History of the Artillery, or by Major (afterwards Sir William) Palliser RA, according to Artillery Through the Ages by Col HCB Rogers! Whether Hussar Captain or Gunner Major, Palliser's liner was a significant advance in gun development because it enabled the updating and further utilization of some hundreds of smoothbore guns which were rapidly becoming obsolete. One would hope that the authorities at RMC may find the means to refurbish these unusual guns and restore them to a place of honour in the museum world.



Serials 124 and 125, the Palliser guns

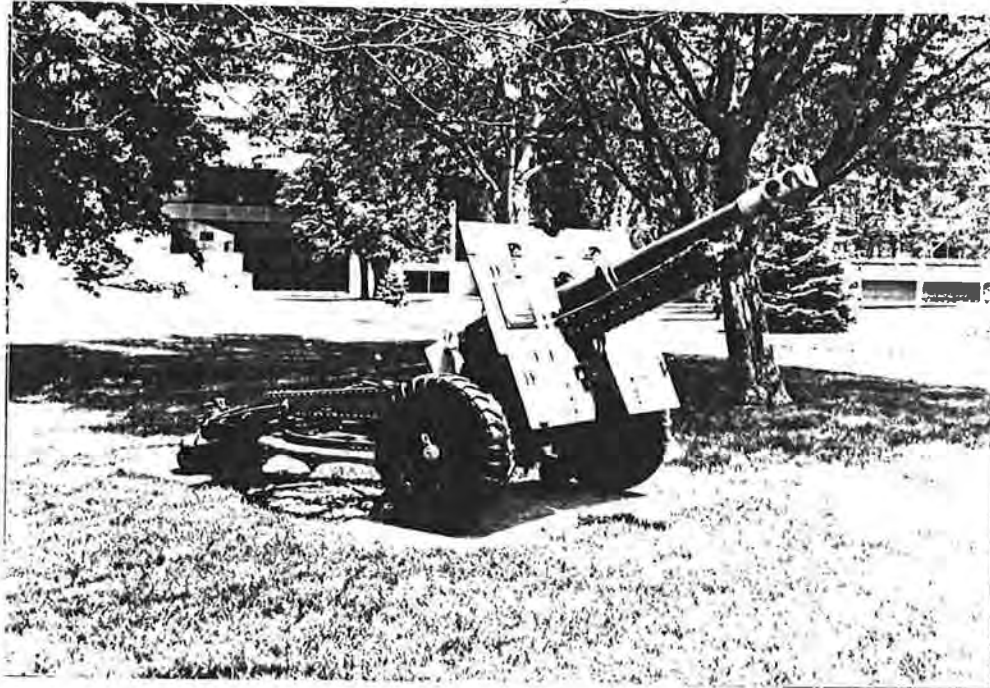
Serials 110 and 111, Codes K 09 and K 10 are two 32 pr carronade barrels which in March 1991 were removed from Fort Henry to the City of Kingston to replace two 24 pr carronade barrels which formerly rested on cement blocks adjacent to the RCHA Memorial in City Park. Rationale for the trade is that the new locations more nearly approximate historical accuracy. At present the 32 pounders are at the City Workshop awaiting construction of wooden carriages and the two 24 pounders are on display at Fort Henry, Serials 40 and 41, Codes AA 122 and AA 123.



Serials 110 and 111, 32 pounder carronade barrels

Serial 152, Code RMC 37 is a gun barrel fragment excavated during construction of one of the newer buildings at RMC. Bearing a G2R cypher placing its age from the period 1727-1760, the piece is two feet long and blown at both ends, with a bore of 4.75 inches, the same calibre as the two barrels stuck in the road as described above. No clues exist as to the circumstances surrounding the blowing of this gun barrel.

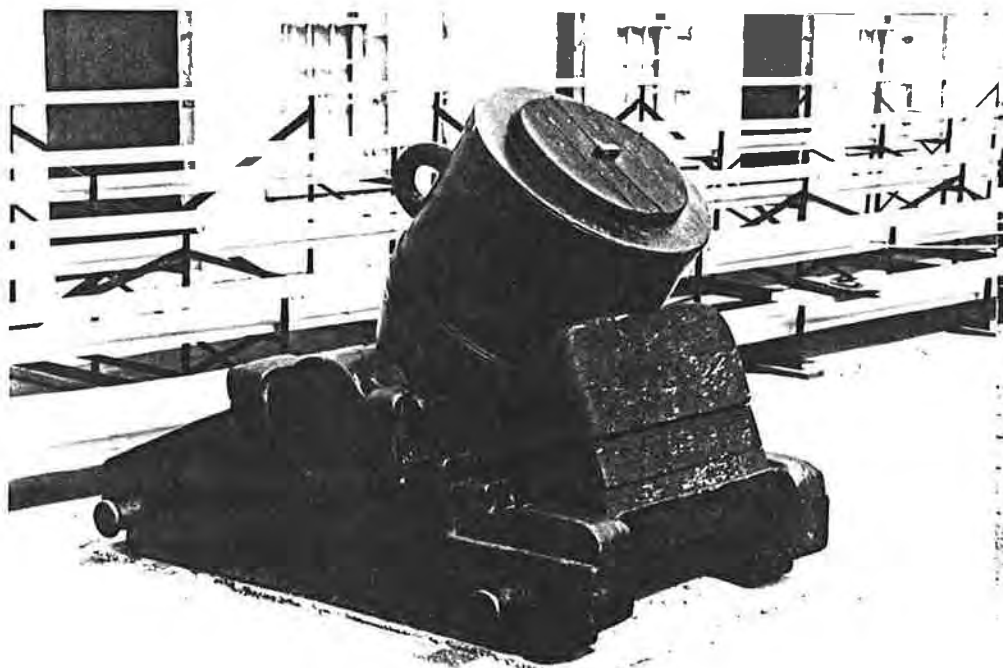
Of the four World War II 25 pounders, two are of special interest. The first is Serial 148, Code RMC 33, known as The Brownfield Gun, having been presented to the Royal Military College by Wilhelmina Brownfield in memory of her late husband, ex-cadet number 1022, Major General HDN Brownfield, CBE, MC, CD. General Brownfield held the senior artillery appointment of BRA 1st Canadian Army in World War II and later was Honourary Colonel Commandant, Royal Regiment of Canadian Artillery.



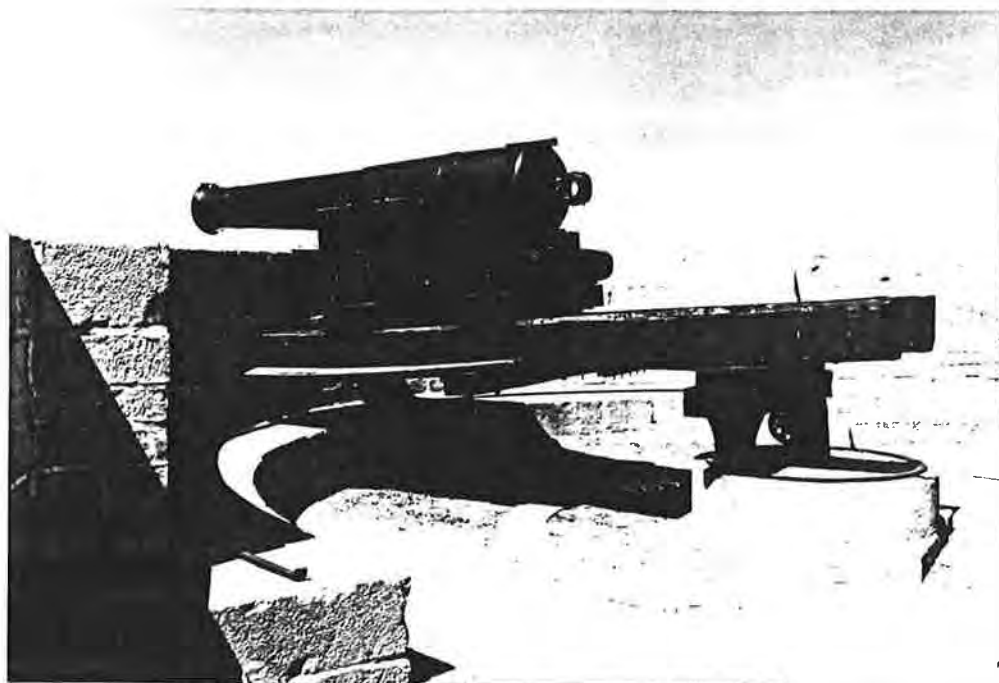
Top: Serial 148, the Brownfield gun. Bottom: serial 30, 25 lb.

The second, Serial 90, Code CFEK 03, was presented to CFB Kingston by a former base commander and Gunner, Colonel JM Fleming. Purely due to the fact that the authors admit to some personal acquaintance with the 25 pounder we can not resist noting a minor fault in this beautifully restored gun. We feel that Col Fleming would want to know that the muzzle velocity charge reader for Charge Super, installed on the range arm of the reciprocating sight, somehow finds itself set at an MV lower than Charge 1 instead of higher than Charge 4!

The distinction of largest calibre would have to go to Serial 42, Code AA 124, a 13 inch mortar at Fort Henry which fired a 200 pound shot to a range of 2700 yards. The largest guns, on the other hand, are of approximately 8 inch calibre. They include the four 8 inch Shell guns at Fort Henry, a 32 pounder Millar gun and an 8 inch Armstrong rifled breech loader at RMC's Fort Frederick.



Serial 42, 13 inch mortar



Serial 50, 8 inch shell gun at Fort Henry



Serial 48, 8 inch Armstrong RBL at Fort Frederick

The smallest artillery piece is the little 18 inches long deck howitzer at Serial 57, Code AA 139, of 1.75 inch calibre, salvaged from the wreck of HMS St Lawrence which was launched in 1814.

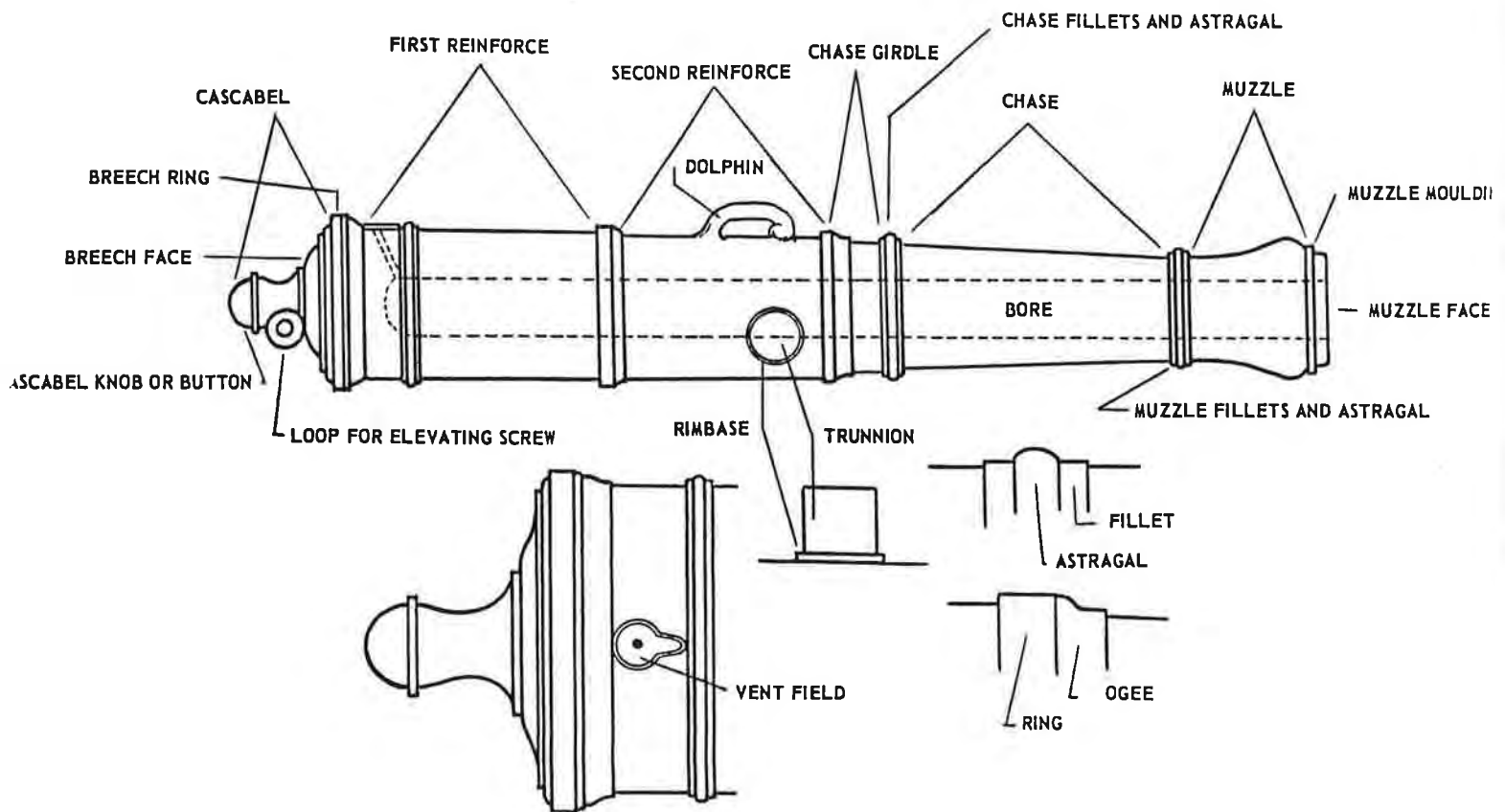
Special mention should be made of the three 32 pounders in the Martello tower at Fort Frederick and the single 32 pounder in the Murney Tower Museum. All of these guns are in their original mounts and are in excellent condition.



Serial 115, 32 pounder at Murney Tower

THE PARTS OF A GUN

(Copied from "Round Shot and Rammers" by Harold L. Peterson)



GUN CENSUS

Annex A, in the form of a spreadsheet, provides information on all the guns we have been able to discover in the Kingston area. In order to compress this information to a workable size it has been necessary to abbreviate to such a degree that the result is difficult to read and understand. This section will therefore explain the composition and abbreviations used in Annex A. A separate list of abbreviations appears at Annex B.

Col 1: Serial listing for each gun.

CODE#: Code number for each gun broadly identifies owner or location of the gun and where appropriate, coincides with previous lists. Thus the codes indicate:

AA -	guns at Fort Henry
CFBK -	CFB Kingston
Ffro -	Fort Frontenac
K -	City of Kingston
MTM -	Murney Tower Museum
RMC -	Royal Military College

LOC: Detailed location of each gun. Thus, for example, the gun at Serial 1, Code# AA 003 is located at Fort Henry Commissary Store. In any given location of a series of guns the first listed is normally identified by a compass point and the remainder numbered in a clockwise direction.

TYPE: Type of weapon - gun, howitzer, carronade, etc. Identifies, where appropriate, if it is a barrel only.

CAL: Calibre - generally measured at the muzzle. In some cases is approximate only due to corrosion or difficulty of access.

LENGTH: Generally length of barrel from breech ring to muzzle face. In some cases approximate only, for same reasons as above.

WT: Weight. Generally shown in same manner as marked on gun, ie hundredweight (112 lb) - quarter hundredweight (28 lb) - pounds. Where a single figure is shown it indicates pounds.

MFR: Manufacturer.

DATE: Date of manufacture.

MKG 2R: Markings on 2nd Reinforce.

MKG 1R: Markings on 1st Reinforce.

MKG Br: Markings on Breech.

MKG CASC: Markings on Casquebel.

MKG R TR: Marking Right Trunnion.

MKG L TR: Marking Left Trunnion.

CARR: Carriage description and markings.

NOTES: Self explanatory.

General: In some cases the amount of detail does not fit neatly into the appropriate columns and it has been necessary to insert it in columns where empty space is available. In such cases the information is shown in brackets and may continue horizontally into other inappropriate columns. For example, Serial 54 shows in brackets, without regard for the column headings: (brass case, positive feed, crank operated, elevating and traversing gears).

Abbreviations: See Annex B.

Page numbers: As in the other annexes, pages are numbered consecutively, preceded by the annex letter. Annex A, however, because of the number of columns, is numbered in sets of pages. Thus the first page is numbered A1a, indicating it is the first page of Annex A set a, the second page is A2a, and so on up to A5a which completes the first set. The next page is A1b, A2b, etc. Within sets the serial numbers at the left side of all pages correspond. For example, on page A5c, the detail at serial 148 applies to the gun shown at serial 148 on page A1c.

DATA BASE

ANNEX A

	CODE#	LOC	TYPE	CAL	LENGTH
1	AA003	FH Comm St	How 24 pr SBML brass	5.72	5'2"
2	AA004	FH Comm St	Gun 9 pr fd SBML brass	4.20	
3	AA008	FH Comm St	Gun 6 pr fd SBML	3.66	
4	AA013	FH RFC NW1	Carronade 32 pr	6.25	
5	AA014	FH RFC NW2	Carronade 32 pr	6.25	4
6	AA015	FH PG S1	Gun 9 pr fd bronze	4.25	6'5"
7	AA020	FH ST3	Gun 12 pr Armstr fd RBL		
8	AA021	FH 1 Cant	Gun 9 pr fd RML	3.00	
9	AA022	FH 1 Cant	Gun 12 pr fd RBL	3.00	
10	AA024	FH 2 Cant	How 5 in fd RBL	5.00	4
11	AA025	FH 2 Cant	MG 1 pr QF Mk 1		B1 2'9"
12	AA026	FH 2 Cant	MG 1.25 pr Mk 111		B1 5'2"
13	AA027	FH 2 Cant	Gun 24 pr short SBML	5.80	6
14	AA028	FH RFC NE1	Carronade 32 pr		
15	AA029	FH RFC NE2	Carronade 32 pr		
16	AA030	FH RFC NE3	Carronade 32 pr		
17	AA061.1	FH 1 Cant	Mortar Coehorn brass	4.52	1
18	AA100	FH M Dit SW	B1 gun 18 pr Bloom SBML	5.29	
19	AA101	FH RPT W1	Gun 32 pr Bloom SBML	6.25	9'6"
20	AA102	FH RPT W2	Carronade 32 pr	6.41	4
21	AA103	FH RPT W3	Gun 32 pr Bloom SBML	6.25	9'5"
22	AA104	FH RPT NW	Gun 32 pr Bloom SBML	6.41	10'4"
23	AA105	FH RPT N1	Gun 32 pr Bloom SBML	6.41	10'4"
24	AA106	FH RPT N2	Gun 32 pr Bloom SBML	6.41	10'4"
25	AA107	FH RPT N3	Gun 32 pr Bloom SBML		
26	AA108	FH RPT N4	Gun 32 pr Bloom SBML		
27	AA109	FH RPT N7	Gun 32 pr Bloom SBML	6.41	
28	AA110	FH RPT N5	Gun 32 pr Bloom SBML		
29	AA111	FH RPT N6	Gun 32 pr Bloom SBML		
30	AA112	FH N Ditch	B1 gun 32 pr Bloom SBML	6.41	
31	AA113	FH RPT NE	Gun 110 pr Armstr RBL	7.00	
32	AA114	FH RPT E1	Gun 24 pr Bloom SBML	5.83	
33	AA115	FH RPT E2	Mortar 10 in	10.00	
34	AA116	FH RPT E3	Carronade 32 pr	6.25	
35	AA117	FH RPT E4	Gun 24 pr Bloom SBML	5.83	
36	AA118	FH RPT SE	Gun 24 pr Bloom SBML	5.83	
37	AA119	FH RPT S1	Gun 3 pr bronze	2.91	52
38	AA120	FH RPT S2	Gun 3 pr bronze	2.91	52
39	AA121	FH PG N1	Gun 24 pr Bloom SBML	5.83	10'4"
40	AA122	FH PG N2	Carronade 24 pr	5.50	3'8"
41	AA123	FH PG N3	Carronade 24 pr	5.50	3'8"
42	AA124	FH PG W	Mortar 13 in	13.00	
43	AA125	FH AB NW	Gun 24 pr Bloom SBML	5.83	
44	AA126	FH AB NE	Gun 24 pr Bloom SBML	5.83	
45	AA127	FH 2Com St	Gun 9 pr fd brass	4.20	
46	AA128	FH PG S2	How 24 pr fd bronze SBML	5.72	48.25
47	AA129	FH St1	Gun 6 pr Armstr fd RBL	2.50	
48	AA130	FH St2	Gun 6 pr Armstr fd RBL	2.50	
49	AA131	FH AB S5	Gun 8 in Shell SBML	8.05	
50	AA132	FH AB S4	Gun 8 in Shell SBML	8.05	
51	AA133	FH AB S3	Gun 56 pr Bloom SBML	7.65	
52	AA134	FH AB S1	Gun 8 in Shell SBML	8.05	
53	AA135	FH AB S2	Gun 8 in Shell SBML	8.05	
54	AA136	FH 1 Cant	Gun Gatling 10 bl	0.45	52", b1 32"
55	AA137	FH Arm Off	Gun 1 in Rampart ML	1.00	
56	AA138	FH Ord St	B1 gun Bloom ML	3.25	6

	WT	MFR	DATE	MKG 2R	MKG 1R
1	1392	(Ch-R, Malte+, Cr)	1853	DXXXVII	12-1-20 VR cyph
2	1540		1816		
3	6CWT		1859		
4	9-3-4		1806		9-3-4 6
5			1808		9-3-4
6	13-3-4	(Elev scr)	1813	DI (dolphins)	GR cyph HSQMYP
7	8-1-4	RGF	1861	8-1-4 VR cyph	
8	896		1873		R Cyph
9	684		1907	(steel core	reinf wire br
10	988	RGF	1899	(brass el	gear handle)
11	410	Vickers-Maxim	1905	(belt fed)	(brass cool
12	410	Vickers-Maxim	1904		(should aim,
13	2316		1847	GR cyph	20-2-20 1847
14					
15					
16					
17	104		1814	GR cyph	HC King 1814 LIX
18		Carron	1814	G3R cyph, cr	
19				GR cyph	
20	17-1-17				(rear sight) 17-1-17
21		Carron	1796	Cyph ?R, cr	
22		Carron	1806	GR cyph, cr	
23					
24		W Co			
25		Carron	1811		
26		Carron	1803		
27		W Co			
28		Carron	1806		
29		Carron	1811		
30				GR cyph, cr	
31			1862		VR cyph (Gtr), cr
32		Carron	1810	G3R cyph, cr	
33					(lift handles)
34					(no discernible mks)
35				G3R cyph, cr	
36		Carron	1806	G3R cyph, cr	
37		(Ch) Gtr G HSQMYP	1809	DCCCXVIII	GR cyph HSQMYP King
38		(Ch) Gtr G HSQMYP	1809	CCCCXIX	GR cyph I&H King 180
39			1806	R cyph	
40	13-0-0				(grad R&L side) 1-16
41	12-3-14				12-3-14 17
42				(handles)	L M
43				GR cyph, cr	
44		Carron	1809	G3R cyph, cr	
45	1540		1813		
46			1853	DXXVIII	VR cyph DEMD 12-1-16
47			1862	3-0-16	Garner cyph VR HSQMYP
48				3-0-17	Garner cyph VR HSQMYP
49			1846		
50					66-0-16 1842
51					08-0-4 1845
52			1844		66-0-24 1844
53					0-24 1844
54	260		1883	(brass case	pos feed,
55			1810		
56				Index cyph	

	MKG BR	MKG CASC	MKG R TR
1	S.Eccles 1853	(R cyph has	Tria juncta
2			
3		(crew 8 Ghrs.	3 Dvrs,
4	Grad 1-10 R&L		
5			
6	H & C King 1813	13-3-4	501
7			
8	(steel core re-	inf by iron	~ br coil,
9	coil, steel jkt	rif poly gr	hook sec,
10	RGF 1898 No 60	(Interr scr	br, 50 lb
11	case, steel	bl, shoulder	aim, pistol
12	el sc & clamp,	buff & rec)	
13		(12 pr cast	1820, bored
14			
15			
16			
17			
18	(grad R&L) 1,2,3		18 P
19			
20		Elev thread	
21	TcV(grad R&L)1,2,3		32P
22	(Grad 1 mk L, 2R)		32P
23			
24			293
25			32P
26			32P
27			252
28			32P
29			32P
30	El grad 1,2,3, R&L	(Ch) 98	
31	81-2-20 RGF WD	(thr br)	(+)
32			24 P
33	16-1-25		
34			91
35	OCK (el grad R&L)		
36	(el gauge R&L side)		95
37	(grad R&L) 1,2,3		24 P
38	(Grad R&L)1,2,3		No 418
39			
40	CvC 13-0-0	(threaded)	24 P
41	(GradR&L) 1-16	El scr thread	
42			(cap) No 9
43	CvCK, Grad 1,2,3 R&L		104
44	(grad)1,2,3 R&L		24 pr
45			
46	S.Eccles 1853		
47	(Scr br)		
48	Scr		
49			
50	side mk L1, R2		1.OW-MOOR
51	El grad 1,2,3 R&L		(+)1.OW-MOOR
52	(elev grad 1L,2R)		1.OW-MOOR
53			(+)1.OW-MOOR
54	crank op, el &	trav gear)	(+)1.OW-MOOR
55			
56			

	MKG L TR	CARR
1	in uno, Dieu et	mon droit)
2		Wood
3	6 horses)	Wood
4		(Wood) CARRONADE 1806
5		(Wood) CARRONADE 1808
6		Wood, Bra hubs RCD BW1901
7	RGF No 52 1861	Wood, wood whs
8	Rif Fr mod)	Iron carr, wood whs
9	interr scr br)	Iron (riv), wood whs
10	shell, 4900x)	Iron box trl, wood whs
11	grip, trigger)	Iron fd carr, wood whs
12		Naval ped deck mt
13	to 24 pr 1847)	Wood, 2 iron fr trks
14		
15		
16		
17		Wood base, handles
18	CARRON 1814	No carr
19	(Carr) 1982	Wood, 2 iron trks, skid
20		good, 2 iron trks
21	55040 CARRON 1796	Wood, fort mt, 1980
22	70466 CARRON 1806	Wood, fort mt, 05-1987
23	70451	06-1986
24	W Co	07-1986
25	77191 CARRON 1811	08-1982
26	63789 CARRON 1803	09-1977
27	W Co	13-1982
28	70445 CARRON 1806	11-1982
29	77199 CARRON 1811	11-19 (?)
30		No carr
31	ED Co No 212 1862	14-1989
32	75682 CARRON 1810	Wood, 15-1980
33	(el g)(cap) No 56	Iron, 4 lift hndl 16-19
34		Wood, 2 iron whs, 17-1975
35	W Co	Wood, 18-1975
36	70059 CARRON 1806	Wood, 19-1986
37		Wood, 4 wood whs
38		Wood, 4 wood whs
39	19039 CARRON 1806	Iron, iron whs
40		Wood(new), 2 iron whs
41		Wood, 2 iron whs
42	(E1)(+)(cap) No9	Iron, (R)L9M, (L)53-1-11
43	W Co	Grn, iron 4wh
44	75536 CARRON 1809	(Grn) 24 PR 21-3-4
45		Fd carr & limber, tools
46		Wood
47	RGF No 71 1862	Wood, Pt No 1 FHG 6 pr
48		Wood, Pt No 2 FHG 6 pr
49	5675	Wood A5-1985
50	1955	Wood A4-1980
51	3231	Wood A3-1974, skids
52	2326	Wood A1-1975 Fort mt
53	2323	Wood A2-1980
54		Lt fd carr, wood whs
55		Swivel mt, sh aim
56	No trs	

NOTES

- 1 Shell 15 lb, R 1750x
- 2 Rd shot 9 lb 5.75 oz
- 3 Rd shot, R 1200x
- 4 Pitted, covers W Ditch
- 5 Pitted, covers W ditch
- 6 Ch-M in wreath, crown
- 7 W/limb, in maint
- 8 Gnr seats, el scr, bra hdl
- 9
- 10 Buff&Rec, wh anchors
- 11 hand op rim brakes
- 12 Brass cool case, steel bl
- 13 Ammo sol, gr, case, 1500x
- 14 Covers E ditch, not open
- 15 Covers E ditch, not open
- 16 Covers E ditch, not open
- 17 Shell 8.5, R 800x
- 18 On grd
- 19 Fort mt, incl plane, s cir
- 20
- 21 Oldest gun?
- 22 Quoin
- 23 Fort mt etc
- 24 Fort mt etc
- 25 Fort mt, etc
- 26 Fort mt, etc
- 27 Fort mt, etc
- 28 Fort mt, etc
- 29 Fort mt, etc
- 30 Bl only, on ground
- 31 Elev scr & crank
- 32 In recoil posn
- 33 Elev wedge
- 34 Badly chipped paint
- 35 In recoil posn
- 36 In recoil posn
- 37 Elev wedge
- 38 Mate to AA119
- 39 Wood elev wedge
- 40 Quoin
- 41 Twin to AA122
- 42 Wedge elev
- 43
- 44
- 45 Rd sh 9 lb 6oz, 1613 fs
- 46 Ch-R cyph, Malt+, crown
- 47 W/limb, in maint
- 48 W/limb, twin to AA129
- 49 Fort Mt
- 50 On gnd, off carr, off mt
- 51 Fort mt, rear pivot
- 52 Elev wedge
- 53 Fort mt
- 54 800-1500 rds/min
- 55 Brown Bess model
- 56 Marine salv

	CODE#	LOC	TYPE	CAL	LENGTH
57	AA139	FH Ord St	How Deck	1.75	18"
58	AA140	FH Ord St	Gun 12 pr Bloom SBML	4.50	9'1"
59	AA141	FH Ord St	B1 gun ML	4.75	7
60	AA142	FH Ord St	B1 gun 6 pr Nav	3.60	6
61	AA143	FH Ord St	B1 gun 4 pr Fr	3.25	6'5"
62	AA144	FH Ord St	B1 gun 4 pr Fr	3.26	6'4"
63	AA145	FH Ord St	B1 gun 8 pr Fr	4.18	7'6"
64	AA146	FH Ord St	B1 gun 4 pr Fr	3.25	6'8"
65	AA147	FH Ord St	B1 gun 4 pr Fr	3.25	6'5"
66	AA148	FH Ord St	B1 gun 9 pr Nav	4.20	5'1"
67	AA149	FH Ord St	B1 gun 9 pr	4.20	6'
68	AA150	FH Ord St	B1 gun 12 pr ML	4.62	
69	AA151	FH Stock St1	B1 carronade 32 pr	6.25	4
70	AA152	FH stock St1	B1 gun	3.25	5'6"
71	AA153	FH Stock St1	B1 how	5.50	3'5"
72	AA154	FH Stock St1	B1 how	5.50	3'5"
73	AA155	FH Stock St1	How	3.75	3'1"
74	AA156	FH Stock St1	B1 gun	2.75	3'6"
75	AA157	FH Stock St1	B1 gun	2.75	3'6"
76	AA158	FH Stock St1	B1 gun	2.50	3
77	AA159	FH Stock St1	B1 gun bronze	4.00	6
78	AA160	FH Stock St2	How 3 in	3.00	2'6"
79	AA161	FH Stock St2	How 3 in	3.00	2'6"
80	AA162	FH Stock St2	B1 gun RBL	3.00	5'7"
81	AA163	FH Stock St2	B1 gun		
82	AA164	FH Stock St2	B1 gun		
83	AA165	FH Stock St2	B1 gun		
84	AA166	FH Stock St2	B1 gun		
85	AA167	FH Stock St2	Gun 3 in	3.00	
86	AA168	FH Dit T E	Gun 24 pr Bloom SBML		
87	AA169	FH Dit T W	Gun 24 pr Bloom SBML		
88	CFBK 01	Fisher Bldg	How 155 mm M1A2	155 mm	
89	CFBK 02	Fisher Bldg	Gun 20 pr tk		
90	CFBK 03	Stethem Hall	Gun 25 pr Mk 1	3.45	
91	CFBK 04	CFBK Main G	Gun 75 mm tk	75 mm	
92	FFro 01	F1 P NW	Mortar 8 in	8.00	1'10"
93	FFro 02	F1 P SW	Mortar 8 in	8.00	1'11"
94	FFro 03	F1 P E	Mortar 10 in	10.00	2'8"
95	FFro 04	F1 P S	How 5 in BL 9 cwt	5.00	
96	FFro 05	River N 1	Gun 32 pr Bloom SBML	6.50	9'6"
97	FFro 06	River N 2	Gun 32 pr Bloom SBML	6.50	9'6"
98	FFro 07	River N 3	Gun 32 pr Bloom SBML	6.50	9'6"
99	FFro 08	River N 4	Gun 24 pr Bloom SBML	5.75	9'6"
100	FFro 09	River S 1	Gun 25 pr	3.45	
101	FFro 10	River S 2	Gun 25 pr	3.45	
102	K 01	Clar st pk	Gun QF 77 mm Mk1	3.00	6'10"
103	K 02	King&West N	Gun Russian SBML	6.75	8'4"
104	K 03	King&West S	Gun Russian SBML	6.75	8'4"
105	K 04	McD Pk	B1 how	5.75	3'5"
106	K 05	FH Tour info	Gun Bloom SBML	5.25	8
107	K 06	McBurney Pk	B1 gun 24 pr Bloom SBML	5.75	
108	K 07	St Andrew Ch	Gun SBML	3.50	3
109	K 08	Kirby res	Gun 3 pr QF Nordenfeld	2.60	3'3"
110	K 09	City Wksp	B1 carronade 32 pr	6.25	4
111	K 10	City Wksp	B1 carronade 32 pr	6.25	4
112	K 11	Turner res	Gun 9 pr RML	3.00	

	WT	MFR	DATE	MKG 2 R	MKG 1R
57					(Mar salv)
58				Indec cyph J3	
59					
60				Indec cyph	
61					
62					
63					
64					
65					
66					107
67					
68					
69	17-0-11				17-0-11
70	11-2-9	Walker Co			11-2-9
71					
72					
73					(Cr) 6
74					
75					
76					
77		I&H King	1812	CCCCXLVII	G3R cyph
78	2-2-15	BP Co			BP Co 2-2-15
79	2-2-15	BP Co			BP Co 2-2-15
80		Armstrong			
81					
82					
83					
84					
85	8-1-2	RGF			VR cyph 8-1-2
86					
87					
88		Sorel Industries	1956		
89					
90			1942		GVI RI cyph
91					(Tac sign 60 LAD)
92	8-1-18				
93	8-1-20				
94	18-1-10	Walker Co			
95	8-3-8			(Ch) VR cyph	(Br ring) 8-3-8
96	55-1-0	Walker Co		G3R cyph	
97	55-9-14	Walker Co		G3R cyph	
98	56-0-21	Carron	1799	G3R cyph	
99	50-3-25	Carron	1796	G3R cyph	
100		Sorel Ind Ltd	1943	(B1) GVI RI	
101		Sorel Ind Ltd	1942		(B1) GVI RI cyph
102		RGF	1917	C of G line	6-0-0
103			1823	Crest d/eag,cr	
104			1826	Crest d/eag,cr	
105					
106		Carron	1814	G3R cyph	
107		Walker Co		G3R cyph	
108	(Brass	plaque) Shannon's	Cann	Came fm rpts	of Lndndry Ire wh i
109		Maxim-Nordenfeld	1890	(Ch) 3	(Bra plate) 1890 No
110		Carron	1904		(under) Carron 1904
111					(under) 593
112	8-1-10	RGF	1873		(Mzl-Firth Steel)

	MKG BR	MKG CASC	MKG R TR
57			S
58		(Mar salv)	
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			16
71			19
72			46
73			
74			
75			
76			
77	(Ch) M cyph		No 447
78			
79			
80			Sir W G Arm-
81			
82			
83			
84	(Crude reinf br)		
85			
86			
87			
88	(Reg # CDN 178)		
89			
90	SIC-9-42		
91			
92	8-1-18 CVC		199
93	8-1-20		201
94	18-1-10		54
95	BL S in HOW No 66		(Axle)RCD1900
96		CV NCK	920
97		55-9-14	165
98		Cv NCK	32P
99		50-3-25	24P
100	25pr11/1 SIL1943 CDA		
101	25PR C MK 11/1 CDN	(Br) SIC-6-42	
102	RGF 1917 No 34 N	(Ch) GV RI, cr	
103	1 el mk R&L	No el threads	1823 36, indec
104		No el threads	1826 36, indec
105		(No ring)	16
106	El mks 1,2,3 R&L		18 PR (?)
107	CVCK		102
108	def Prot fm 1649-88 Pres to Wm Sh		of K in 1865
109	PATENT VON BROADWELL (Buff&Recup)		(Bra el&trv)
110			
111			
112	595 1873		

MKG L TR

CARR

57	L	Swivel mt in oak bl
58		Fm Charlotte non-match
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70	W Co	
71	L	
72	L	
73		Wood, Nav, 4 wood trks
74		
75		
76		
77		
78		Wood, 4 wood trks
79		Wood, 4 wood trks
80	strong & Co No2540	
81		
82		
83		
84		
85	RGF	Wood, fd, dbl beam
86		(18 pr upbored to 24 pr)
87		
88		Split trail # 0034460
89		
90		W/Platfm, burn mzl bk
91	(DND No 78-932)	(In tk Sherman M4A2)
92	S BOWLING	Great Ch 2 LB Ra 2000yds
93	(Cap) 201	Great Ch 2 LB Ra 2000Yds
94	W Co	16-3-14 BO
95	(Axle) RCD No 204	(Whs off for maint)
96	W Co	Wood, 4 wood trks
97	W Co	Wood, 4 wood trks
98	39493 CARRON 1799	Wood, 4 wood trks
99	60898 CARRON ????	Wood, 4 wood trks
100		(Plaq: Refurb 2RCHA 1984
101		(Plaq: Refurb 1984 etc)
102		RCD Wts (indec)
103	N19808, indec	Wood grn repro, 4 iron wh
104	N20565, indec	Wood grn repro, 4 iron wh
105	L	No carr-Cement slab
106	1814 CARRON	Wood, grn 4 iron whs
107	W Co	No carr-cement stand
108	In 1909 pres to St	And Pres Ch by Appr Boys
109	(Rim brakes-crank)	Dbl beam iron fd carr
110		(Exch w/FH for 2x24 Pr
111		
112		Wood Grn

NOTES

57 From HMS St Lawr laun 1814
 58 Fm HMS Charlotte
 59 Mar salv, no trs
 60 Mar salv, no trs
 61 Mar salv, no trs
 62 Mar salv, no trs
 63 Mar salv, no trs
 64 Mar salv, no trs
 65 Mar salv, no trs
 66 Mar salv, no trs
 67 Mar salv, no trs
 68 Mar salv, B1 burst
 69
 70
 71
 72 Twin to AA153
 73
 74 Mar salv
 75 Mar salv, twin to AA156
 76
 77
 78
 79 Twin to AA160
 80 3 grooves
 81 Under furn, not meas
 82 Under furn, not meas
 83 Under furn, not meas
 84 Under furn, not meas
 85 Elev scr
 86 Inaccessible, not seen)
 87 Inaccessible, not seen
 88 Claim on loan fm War Res
 89 In Tk Centurion Mk 5
 90 Plaq: Pres Col J Fleming
 91 Pres Col KG Troughton 1983
 92 Carr side 11-1-6
 93 Carr side 11-1-12
 94 Caps mkd R & L
 95 B1 has 20 grooves
 96 L hand gun of 4
 97 2nd gun fm left
 98 3rd gun fm left
 99 Date illeg, E1 mks 1,2,3
 100 Tac sign 42 second bty(B)
 101 Tac sign 42 senior bty (A)
 102 Steel ped nav mt
 103
 104
 105 Cast iron
 106
 107 E1 mks 1,2,3 R&L br
 108 Derry Ldge #1. Rest 1990
 109 2 gnr seats
 110 for city pk nr RCHA mem)
 111 (Same as K 9)
 112 Pres by 5 RALC

CODE#	LOC	TYPE	CAL	LENGTH
113	MTM 01 MTM M E	Carronade 32 pr	6.25	4
114	MTM 02 MTM M W	Carronade 32 pr	6.25	4
115	MTM 03 MTM 2 fl	Gun 32 pr Bloom SBML	6.40	9'6"
116	RMC 01 FFT 3 N	Gun 32 pr Bloom SBML	6.50	
117	RMC 02 FFT 3 E	Gun 32 pr Bloom SBML	6.50	
118	RMC 03 FFT 3 W	Gun 32 pr Bloom SBML	6.50	
119	RMC 04 P Sq NE	Gun 32 pr Bloom SBML	6.00	
120	RMC 05 FF 2 (clws)	Gun 32 pr Millar SBML	8.00	9'.5"
121	RMC 06 FF 3	Gun 32 pr Bloom SBML	6.50	9'6"
122	RMC 07 FF 5	Gun 32 pr Bloom SBML	6.25	
123	RMC 08 FF 6	Gun 32 pr Millar SBML	8.00	9
124	RMC 09 P YD	B1 gun 32 pr Palliser	6.25	9'6"
125	RMC 10 P YD	B1 gun 32 pr Palliser	6.25	9'6"
126	RMC 11 Crer G W	Gun 32 pr Bloom SBML	6.50	
127	RMC 12 Crer G E	Gun 32 pr Bloom SBML	5.75	
128	RMC 13 Ft Hald	Gun 32 pr Bloom SBML	6.50	
129	RMC 14 Mac W	Gun 32 pr Bloom SBML	6.00	
130	RMC 15 Mac E	Gun 32 pr Bloom SBML	6.00	
131	RMC 16 FF NE 1	Gun 24 pr Armstr SBML	5.75	
132	RMC 17 FF 7	Gun 24 pr Armstr SBML	6.25	6
133	RMC 18 SSM N	Gun 24 pr SBML bronze	5.75	4'9"
134	RMC 19 SSM S	Gun 9 pr SBML bronze	4.25	5'11"
135	RMC 20 F1 P E	Gun 9 pr SBML bronze	4.25	6
136	RMC 21 F1 P W	Gun 9 pr SBML bronze	4.00	6
137	RMC 22 FFT 2 NW	Carronade 32 pr	6.00	
138	RMC 23 FFT 2 N	Carronade 32 pr	6.00	
139	RMC 24 FFT 2 NE	Carronade 32 pr	6.12	
140	RMC 25 FFT M S	Carronade 32 pr	6.50	
141	RMC 26 FFT M N	Carronade 32 pr	6.00	
142	RMC 27 FFT M NE	Carronade 32 pr	6.00	
143	RMC 28 SF N	Mortar 10 in	10.00	
144	RMC 29 SF S	Mortar 10 in	10.00	
145	RMC 30 FF 4	Gun 8 in Armstr RBL	8.00	
146	RMC 31 Crerar Cr	Gun 88 mm Pak 43	88mm	
147	RMC 32 Crerar Cr	Gun 88 mm Flak	88mm	
148	RMC 33 Massey Lib	Gun 25 pr		(Reg#16055)
149	RMC 34 Crerar Cr	Gun Naval QF 4 in twin	4 in	
150	RMC 35 Crerar Cr	Gun 20 pr tk	3.25	
151	RMC 36 In M Gate	Gun 75 mm tk	75 mm	
152	RMC 37 FFT B	B1 gun fragment	4.75	2
153	RMC 38 INN MG N	B1 gun	4.75	2.5
154	RMC 39 INN M G S	B1 gun	4.75	2.5
155	K 12 Looking Res	Gun 175 in SBML	1.75	2'8"

	WT	MFR	DATE	MKG 2 R	MKG 1R
113	17-0-4	Carron	1811		32 P CARRON 1811 77
114	16-3-24	Carron			16-3-24
115	55-2-14	Walker Co		G3R cyph	(Plaq: cast in 1800
116	56-?-?	Carron	1806	G3 cyph	
117	56-3-0	Carron	1807	G3 cyph	
118	56-0-25	Carron	1811	G3 cyph	
119		Walker Co		G3R cyph	
120	64-2-10	Walker Co	1842		64-2-10 1842
121	67-0-9	Carron	1807	G3R cyph	
122	53-5-25	Walker Co		G3R cyph	
123	64-3-0	Walker Co	1842		64-3-0 1842
124		RGF	1870	VR cyph	
125				VR cyph	
126		Walker Co		G3 R cyph	
127	50-1-14	Walker Co		G3R cyph	
128		Carron	1807	G3R cyph	
129				G3R cyph	
130		Walker Co		G3R cyph	(Br) EL grads 1,2,3
131			1847	VR cyph	20-0-4 1847
132	20-0-0		1847	VR cyph	20-0-0 1847
133			1843	CLXXV 12-3-7	VR cyph DEMD
134		FM Eardly-Wilmot	1859	13-2-0 VR cyph	4862
135			1813	2 Dolph DLVIII	G3R Garter H3QMYF
136			1812	2 dolph CCCLIV	G3R cyph
137	17-3-7				
138			1808		(Ser 32 PD WG 1808 :
139	17-2-21	Carron	1804		32 P CARRON 1804 67
140	17-3-7				(Ser G 546)
141	17-3-11				17-3-11
142	17-1-21				17-1-21
143		Walker Co	1856		(Shot in Mz1)
144	8-1-9	(Shot in mz1)			
145	81-3-3	RGF	1862	VR cyph	81-3-3
146					
147					
148					
149					
150					
151					
152					9 G2R cyph
153					
154					
155	300(2)	(Fe)			

	MKG BR	MKG CASC	MKG R TR
113	(Brass vent)	(Acc#)X71.0801	
114		(Acc#)X71.0802	
115	55-2-14	(Acc#X71.130.02	168
116	56-7-7		32P
117	56-3-0		32 PR
118	56-0-25		32P
119			U
120			0
121	67-0-9		32PR
122	53-5-25		277
123	CvC K		0
124	(Mz1 face) RGF IRON		
125			
126	CV NC K		9 JJ
127	50-1-14		123
128	56-3-0		0
129	42-?-17		120 or 123
130	CvCK 42-?-24		Plaque 24 pr
131	CV C K (E1 1,2,3,4)		16
132	CvC K		12
133	W NORTH 1843	(Ch) GM cyph	(for
134	FM Eardly-Wilmot	(Ch) SH garter	H21 DCCCXXII
135	H and C King 1813	(Br) 13-3-6	(BR) E1 1,2,3
136	I and H King 1812	(Br) 13-3-13	
137		(Ser G8)	
138	50	(Ser 32 PD WG)	
139	CvC K	481	
140			
141	(Ser 2 648)		
142	(Ser 5 38)		
143			62
144			
145	(RGF 7.1 N BL GUN	No215 82 CWT)	0
146	(Vert sl) Br rg 1243		
147	R5456 1042 CXX		
148			
149	SIL1944		(Br) S 13769
150			
151			
152			
153			
154			
155			

Deleg

MKG L TR

CARR

113	(Cap) 32	Wood, 2 iron trks
114	(Cap) 32	Wood, 4 iron trks
115	W Co	(wood) 1859 32 PR
116	70538 CARRON 1806	32 Pr or 8 in 1858
117	71851 CARRON 1807	No 88 1861
118	77204 CARRON 1811	32 pr or 8 in
119	W Co	(Iron grn, 4 whs) 24 PR
120	W Co	(None)
121	716331 CARRON 1807	Loc pattern, iron
122	W Co	
123	W Co	Wood, Fort Mt
124	1870 No 701 MK 1	Carr separate
125		Carr separate
126	W Co	Wood Repro
127	W Co	Wood repro
128	71306 CARRON 1807	Wood, grn
129	plaque 24 pr, etc	Iron grn 24P
130	W Co	Iron Grn 24 P
131	G	Wood, Fort mt, rear pvt
132	C	Wood, Fort mt
133	Sir G Murray MGD)	Wood
134	1859	Wood, grn
135	(Ch) M cyph	Wood grn
136	(Ch) M cyph	Wood grn
137		Wood orig
138		Wood orig
139		Wood orig
140		Wood orig
141		Wood orig
142		Wood orig
143	W Co	Wood 17-0-0 62 B D
144		Wood, 11-1-13 188
145	ED Co No 215 1862	(Wood) Fort mt 1979
146		Cruc Pltfm, Mzl Brake
147		Cruc Pltfm
148		W/pltfm, Muzz brake
149	(Br) S 14492	
150		Mtd in Centurion tk Mk5
151		
152		(Ends blown)
153		Stuck in rd at 30 deg
154		(Stuck in rd at 30 deg)

155

Wood repro local pattern

NOTES

113 Casc threaded
 114 Casc threaded
 115 Fort mt, 2 hdspsks, blk & T
 116 Fort Mt orig
 117 Fort mt orig
 118 Fort mt orig
 119
 120 Sitting on iron blocks
 121
 122
 123
 124 Claim only Pal guns ex UK
 125 Claim only Pal guns ex UK
 126
 127 El Grads 1, 2, 3 R&L
 128 Heavy paint job
 129
 130
 131 Plaq 24 Pr Armstr ML 1847
 132
 133 (MGO) Mestria juncta in uno
 134 SH cyph of SS(W) S Herbert
 135 M cyph of MGO, Mulgrave
 136 M cyph of MGO Mulgrave
 137 Quoin 24 pr 500 W
 138 Plaq: 32 Pr SBML Crnde
 139 (Plaq: 32 pr SBML Cde 1779)
 140 (Plaq: 32 pr SBML Cde 1779)
 141 (Plaq: 32 pr SBML Cde
 142 (Plaq: 32 pr SBML Cde
 143 Axle stubs
 144 Great che 2 lbs Ra 2000 yd
 145 Iron balls on br screw
 146 German A Tk gun
 147 German AA gun, also fd
 148 , Brownfield gun, plaque
 149 Fm Dest HMCS Huron
 150 CFR # 52-81053 class of 79
 151 Mtd in Sherman tk "Athene"
 152 Excavated in bldg constr
 153 Guide for carriage whs?
 154 Guide for carriage whs?

ABBREVIATIONS

<u>ABBREV</u>	<u>MEANING</u>
AA	anti-aircraft
AB	Advance Battery
abbrev	abbreviation
appr	apprentice
Arm Offr	Armament Officer
Armstr	Armstrong
A tk	anti-tank
B	basement
bk	brake
bl	barrel
bl	block
bldg	building
blk & t	block & tackle
Bloom	Bloomfield
br	breech
Br	British
bra	brass
bty	battery
buff	buffer
burn	burnished
cal	calibre
cann	cannister
cann	cannon
cant	canteen
carr	carriage
casc	cascobel
cde	carronade
CFBK	CFB Kingston
ch	chase
ch	church
Clar st	Clarence Street
clws	clockwise
C of G	centre of gravity
Comm st	commissary store
constr	construction
cool	cooling
cr	crown
cruc	cruciform
cwt	hundredweight
cyph	cypher
dbl	double

ANNEX B

<u>ABBREV</u>	<u>MEANING</u>
d/eag	double eagle
def	defence, defended
deg	degree
DEMD	Dieu et Mon Droit
dest	destroyer
dit	ditch
dolph	dolphins
dvr	driver
E	east
el g	elevating gear
elev	elevating
exch	exchange
fd	field
FF	Fort Frederick
Ffro	Fort Frontenac
FFT	Fort Frederick Tower
FH	Fort Henry
fl	floor
fl p	flagpole
fort	fortress
fm	from
Fr	French
fr	front
fps	feet per second
Ft Hald	Fort Haldimand
furn	furniture
G	gate
gnd	ground
gnr	gunner
gr	grape
gr	groove
grads	graduations
grn	garrison
grnd	ground
Gtr	Garter
hdsbk	handspike
hdl	handwheel
hdl	handle
how	howitzer
HSQMYP	Honi Soit Qui Mal Y Pense

illeg	illegible	N	North
in	inch	Nav	Naval
IN M G	Inner Main Gate	NE	northeast
incl	inclined	no	number
Ind	Industries	nr	near
indec	indecipherable	NW	northwest
inter	interrupted	op	operated
Ire	Ireland	Ord St	Ordnance Store
Jkt	jacket	orig	original
K	Kingston	oz	ounce
L	left	p sq	parade square
laun	launched	p yd	paint yard
lb	pound	Pal	Palliser
ldge	lodge	ped	pedestal
lib	library	PG	parade ground
limb	limber	pk	park
Lndndry	Londonderry	plaq	plaque
loc	local, location	plfm	platform
lt	light	pos	positive
ltd	limited	posn	position
M	main	pr	pounder
maint	maintenance	pres	presented, president
Mac	Mackenzie	Pres ch	Presbyterian church
Malt+	Maltese cross	Prot	Protestantism
mar	marine	ptd	painted
McD	Macdonald	pvt	pivot
meas	measured	QF	Quick firing
mem	memorial	R	Range, right, royal
mfr	manufacturer	RBL	rifled breech
MG	machine gun		loading
MGO	Master General of	RCD	Royal Carriage Dept
	Ordnance	rd	road, round
mk	mark	rec	recuperator
mkg	marking	refurb	refurbished
ML	muzzle loading	Reg#	registered number
min	minute, minimum	reinf	reinforced
mod	modified	repro	reproduction
mt	mount	res	residence
mtd	mounted	rest	restored
MTM	Murney Tower Museum	RFC	Reverse fire chamber
mzl	muzzle	rg	ring

RGF	Royal Gun Factory
riv	rivet
RML	rifled muzzle loading
RPT	rampart
S	south
salv	salvage
SBML	smoothbore muzzle loading
s circ	semi circular
scr	screw
sec	second, section
SF	Stone Frigate
Sh	Shannon
sh	shoulder, shot
SIL	Sorel Industries Ltd
sl	sliding
sol	solid
SS(W)	Secretary of State for War
SSM	Senior Staff Mess
St And	Saint Andrews
ST	storeroom
St 1	Storeroom 1
St Lawr	St Lawrence
Stock	stockade
SW	southwest
T	tower
tac	tactical
thr	threaded
tk	tank
tr	trunnion
trks	trucks
trl	trail
vert	vertical
W	west
wh	where
w/	with
wh	wheel
wt	weight
x	yards

ANNEX C

GUN SUMMARY

TYPE	CAL	FH	CFBK	Ffro	K	MTM	RMC	TOTAL
B1 carronade 32 pr	6.25	1	1		2			3
B1 gun (assorted)		15						15
B1 gun fragment	4.75						1	1
B1 gun (in road)	4.75						2	2
B1 gun 4 pr Fr	3.25	4						4
B1 gun 6 pr Nav	3.60	1						1
B1 gun 8 pr Fr	4.18	1						1
B1 gun 9 pr	4.20	1						1
B1 gun 9 pr Nav	4.20	1						1
B1 gun 12 pr ML	4.62	1						1
B1 gun 18 pr Bloom SBML	5.29	1						1
B1 gun 24 pr Bloom SBML	5.75				1			1
B1 gun 32 pr Bloom SBML	6.41	1						1
B1 gun 32 pr Palliser	6.25						2	2
TOTAL Barrels only		27	0	0	3	0	5	35
Carronade 24 pr	5.50	2						2
Carronade 32 pr	6.00	7				2	6	15
TOTAL Carronades		9	0	0	0	2	6	17
Gun 1 in Rampart ML	1	1						1
Gun 3 in	3	1						1
Gun 3 pr bronze	2.91	2						2
Gun 3 pr QF Nordenfeld	2.6				1			1
Gun 4 in QF Nav twin	4						1	1
Gun 6 pr fd Armstr RBL	2.5	2						2
Gun 6 pr fd SBML	3.66	1						1
Gun 8 in Armstr RBL	8						1	1
Gun 8 in Shell SBML	8.05	4						4
Gun 9 pr fd brass	4.2	2						2
Gun 9 pr fd bronze	4.25	1					3	4
Gun 9 pr fd RML	3	1			1			2
Gun 10 bl Gatling	0.45	1						1
Gun 12 pr Bloom SBML	4.5	1						1
Gun 12 pr fd Armstr RBL		1						1
Gun 12 pr fd RBL	3	1						1
Gun 18 pr Bloom SBML	5.25				1			1
Gun 20 pr tk	3.25		1				1	2
Gun 24 pr Armstr RML	5.75						2	2
Gun 24 pr Bloom SBML	5.75	8			1			9
Gun 24 pr bronze SBML	5.75						1	1
Gun 24 pr short SBML	5.8	1						1
Gun 25 pr	3.45		1	2			1	4
Gun 32 pr Bloom SBML	6	10		3		1	11	25
Gun 32 pr Millar SBML	8						2	2
Gun 56 pr Bloom SBML	7.65	1						1
Gun 75 mm tk	75 mm		1				1	2
Gun 77 mm QF Mk I		3			1			1
Gun 88mm Flak	88 mm						1	1

TYPE	CAL	FH	CFBK	Ffro	K	MTM	RMC	TOTAL
<i>Run 1.75 in SBML</i>	<i>1.75 in</i>							
Gun 88 mm Pak 43	88 mm						1	1
Gun 110 pr Armstr RBL	7	1						1
Gun Russian SBML	6.75				2			2
Gun SBML "Shannon's "	3.5				1			1
TOTAL Guns		40	3	6	8	1	26	84
How deck	1.75	1						1
How 3 in	3	2						2
How	3.75	1						1
How 5 in fd RBL	5	1		1				2
How 155 mm M1A2	155mm		1					1
How 24 pr brass SBML	5.72	1						1
How 24 pr fd bronze SBML	5.72	1						1
TOTAL Howitzers		7	1	1	0	0	0	9
MG 1 pr QF Mk I		1						1
MG 1.25 pr Mk III		1						1
TOTAL MGs		2	0	0	0	0	0	2
Mortar Coehorn brass	4.52	1						1
Mortar 8 in	8			2				2
Mortar 10 in	10	1		1			2	4
Mortar 13 in	13	1						1
TOTAL Mortars		3	0	3	0	0	2	8
GRAND TOTAL		88	4	10	10	3	39	155



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